

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A block construction system comprising:
a first block defining a longitudinal axis and having a top face and a bottom face with opposed side faces and opposed end faces extending therebetween, wherein said top face is formed with at least one ~~raised~~, substantially flat horizontal raised portion positioned between a pair of longitudinally aligned rounded edges, ~~with each said edge being rounded,~~ wherein said top face is further formed with a pair of substantially flat horizontal stop surfaces, with each said ~~rounded edge~~ stop surface positioned between said ~~flat portion and a respective stop surface~~ rounded edge and a respective side face, and wherein said first block forms an opening extending vertically between said top face and said bottom face, with said opening being positioned between said rounded edges; and

a second block defining a longitudinal axis and having a top face and a bottom face with opposed side faces and opposed end faces extending therebetween, wherein said bottom face is ~~formed with a pair of stop surfaces~~ and at least one substantially flat recessed ~~portion recessed from said stop surfaces and~~ positioned between a pair of longitudinally aligned curved surfaces that are shaped to substantially conform to said edges on said top face, said recessed portion for engaging said raised portion when said second block is stacked on said first block, wherein said bottom face is further formed with a pair of substantially flat horizontal stop surfaces, with each said stop surface positioned between a respective curved surface and a respective side face, ~~[[and]] said bottom face stop surfaces for engaging said top face stop surfaces to vertically align said first block with said second block, and wherein said second block forms an opening extending vertically between said top face and said bottom face of said second block, with said second block opening being positioned between said curved surfaces, and further wherein said openings of said first block and said second block are vertically aligned when said second block is stacked on said first block to form a passageway through said blocks for receiving a support member.~~

2. (Currently Amended) A system as recited in claim 1 wherein said top face has a width, w , transverse to said longitudinally aligned rounded edges, said rounded edges have a radius of curvature, r , with said radius of curvature being greater than approximately one twelfth of said block width ($r > w / 12$).

3. (Original) A system as recited in claim 2 wherein said radius of curvature, r , is approximately one-half inches ($r \approx 0.5$ in.).

4. (Currently Amended) A system as recited in claim 1 wherein ~~said first block extends from a first side to a second side and wherein~~ each said side is formed with a notch immediately below each said top face stop surface, each said notch for creating a longitudinally aligned channel with a said bottom face stop surface to simulate a mortar joint between said first and second blocks.

5. (Original) A system as recited in claim 1 wherein each said block is formed with a first end face and a second end face with said first end face formed with a vertically aligned tongue having a tongue surface with a radius of curvature, R , said tongue surface extending along said radius of curvature, R , approximately one-hundred eighty degrees, and said second end formed with a vertically aligned groove having a groove surface substantially conformal with said tongue surface to receive a said tongue from an adjacent block in a common course.

6. (Currently Amended) A system as recited in claim 5 wherein said top face has a width, w , transverse to said longitudinally aligned rounded edges and said radius of curvature of said tongue surface, R is greater than approximately one fourth the width of said block ($r > w/4$).

7. (Original) A system as recited in claim 6 wherein said radius of curvature of said tongue surface, R , is approximately one and one-half inches ($r \approx 1.5$ in.).

8. (Currently Amended) A block ~~construction system comprising:~~

~~a first block having an end face as recited in claim 16 wherein the second end face is formed with a vertically aligned extending tongue having a tongue surface with a radius of curvature, R, wherein said tongue surface extends along said radius of curvature, R, approximately one-hundred eighty degrees, said end face extending horizontally between a first side of said block and a second side of said block with said tongue positioned approximately midway between said side faces of said block sides on said end face; and wherein said~~

~~a second block having an end face~~ first end face is formed with a vertically aligned extending groove having a groove surface substantially conformal with said tongue surface, said groove for receiving said tongue of ~~said first block~~ when said first and second blocks are positioned adjacent a selected block positioned adjacent to said block in a common course to align ~~said first and second the adjacent~~ blocks and establish a hinge joint ~~between said first and second blocks therebetween~~ to accommodate minor vibration of said adjacent blocks during the service life of said system.

9. (Currently Amended) A system as recited in claim 8 wherein said end face of said ~~[[first]]~~ block has a width, w, transverse to ~~said vertically aligned tongue~~ and said radius of curvature of said tongue surface, R is greater than approximately one fourth the width of said block ($r > w/4$).

10. (Original) A system as recited in claim 8 wherein said radius of curvature of said tongue surface, R, is approximately one and one-half inches ($r \approx 1.5$ in.).

11. (Canceled)

12. (Currently Amended) A system as recited in claim ~~[[11]]~~ 16 wherein said top face has a width, w , ~~transverse to said longitudinally aligned edges, said rounded edges have~~ and said rounded edges have a radius of curvature, r , with said radius of curvature being greater than approximately one twelfth of said block width ($r > w / 12$).

13. (Original) A system as recited in claim 12 wherein said radius of curvature, r , is approximately one-half inches ($r \approx 0.5$ in.).

14. (Canceled).

15. (Canceled).

16. (New) A block for use in a construction system utilizing a plurality of said blocks, said block defining a longitudinal axis and comprising:

a first end face and a second end face substantially parallel to each other and substantially perpendicular to the axis;

a first side face and a second side face substantially parallel to each other and to the axis;

a top face substantially parallel to the axis, with said top face including a pair of substantially planar stop surfaces terminating at respective side faces, a pair of longitudinally aligned rounded edges abutting respective shoulder surfaces, and a substantially planar raised surface positioned between the pair of rounded edges, wherein the raised portion is raised from the stop surfaces;

a bottom face substantially parallel to the top face and the axis, with said bottom face including a pair of substantially planar stop surfaces terminating at respective side faces and dimensioned to engage the stop surfaces on the top face of a juxtaposed block, a pair of longitudinally aligned curved surfaces abutting respective stop surfaces on the bottom face, with the curved surfaces dimensioned to engage the rounded edges on the top face of the juxtaposed block, and a substantially planar recessed surface positioned between the pair of curved surfaces, wherein the recessed surface is recessed from the stop surfaces of the bottom face and is dimensioned to engage the raised surface of the top face of the juxtaposed block; and

an opening perpendicular to the axis and extending between said top face and said bottom face, with said opening being positioned between said rounded edges and said curved surfaces, wherein the opening aligns with the opening in the juxtaposed block to form a passageway to receive a support member.

17. (New) A block as recited in 16 wherein the first end face includes a vertically-extending groove and the second end face includes a vertically-extending tongue dimensioned to engage the groove on the first end face of an adjacent block.

18. (New) A block as recited in claim 17 wherein the top face includes a longitudinally-extending central slot formed in the raised portion, and wherein the bottom face includes a longitudinally-extending central tab formed in the recessed portion, with the tab dimensioned to engage the slot of the juxtaposed block.

19. (New) A block as recited in claim 18 wherein the slot, tab, groove and tongue of the block are co-planar.

20. (New) A block as recited in claim 16 wherein the first end face defines a vertical cutout extending through the top face and the bottom face, with said vertical cutout being in communication with the opening for insertion of a support element through the vertical cutout and into the passageway formed by a column of juxtaposed blocks.

21. (New) A method for constructing a structure from a plurality of blocks comprising the steps of:

providing a plurality of blocks, with each block defining a longitudinal axis and comprising a first end face and a second end face substantially parallel to each other and substantially perpendicular to the axis, a first side face and a second side face substantially parallel to each other and to the axis, a top face and a bottom face substantially parallel to each other and to the axis, wherein said top face includes a pair of substantially planar stop surfaces terminating at respective side faces, a pair of longitudinally aligned rounded edges abutting respective shoulder surfaces, and a substantially planar raised surface positioned between the pair of rounded edges, with the raised portion being raised from the stop surfaces, wherein said bottom face includes a pair of substantially planar stop surfaces terminating at respective side faces and dimensioned to engage the stop surfaces on the top face of a juxtaposed block, a pair of longitudinally aligned curved surfaces abutting respective stop surfaces on the bottom face, with the curved surfaces dimensioned to engage the rounded edges on the top face of the juxtaposed block, and a substantially planar recessed surface positioned between the pair of curved surfaces, with the recessed surface being recessed from the stop surfaces of the bottom face and is dimensioned to engage the raised surface of the top face of the juxtaposed block, and wherein each block includes an opening perpendicular to the axis and extending between said top face and said bottom face, with said opening being positioned between said rounded edges and said curved surfaces;

placing a block in a desired location;

juxtaposing another block on the placed block, with said rounded edges of the placed block and said curved surfaces of the juxtaposed block directing the blocks into a proper alignment with the openings forming a vertically extending passageway; and

inserting a support element into the passageway.

22. (New) A method as recited in claim 21 wherein the first end face of each block includes a vertically-extending groove and the second end face of each block includes a vertically-extending tongue dimensioned to engage the groove of an adjacent block, the method further comprising the step of:

positioning a selected block adjacent to the placed block with said groove of said selected block engaging said tongue of said placed block to align and secure the placed and selected blocks.

23. (New) A method as recited in claim 21 wherein the first end face of each block defines a vertical cutout extending through the top face and the bottom face with said vertical cutout being in communication with the opening, the method further comprising the step of repeating the juxtaposing step to erect a column of blocks; and wherein, in the inserting step, the support element is inserted into the passageway of the column of juxtaposed blocks through the vertical cutouts in the blocks.